

11/28/2018



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200
Fax 613 632-5246

Print

Purchasing Receipts

PO No	Supplier	Line Item No	Ref No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name			
PO041804	MES002-VC	1	1	Net 60	MSTEEL-A2-B0.500X1.250	AISI A2 Tool Steel Bar, 0.500 X 1.250 : MATERIAL: AISI A2 STEEL, ANNEALED CONDITION AS PER ASTM A681 receive ft				98	11/28/2018	98		S132658	Stock	11/28/2018	\$ 15.99 / ft	0		\$1,571.66	Metaux Solutions			
		2			M4130NB0.500X03.000	4130 Bar 0.500 X 3.00 : MATERIAL: AISI 4130N STEEL BAR PER MIL-S-6758 OR AMS 6345/6348/6370/6528 CUT TO SIZE 14" receive ft				47		47		S132661	Stock	11/28/2018	\$ 23.33 / ft	0		\$1,088.74	Metaux Solutions			
Total:											145			145									\$1,998.02	

Plex 11/28/2018 1:12 PM dart.Tollis.Andrew



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041804

Supplier: MES002-VC
Metaux Solutions
2625 boul Jacques-Cartier Est
Longueuil
QC
J4N 1L7 Canada
Phone: 800 558 8858
Fax: 514 633 8044

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO041804

PO Date: 11/21/18

Due Date: 11/28/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: clavoie@dartaero.com

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
NOV 23 2018

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		MSTEEL-A2-B0.500X1.250		AISI A2 Tool Steel Bar, 0.500 X 1.250 : MATERIAL: AISI A2 STEEL, ANNEALED CONDITION AS PER ASTM A681 receive ft	Firmed	-	11/28/18	96 ft	0 ft	96 ft	\$15.99/ft	\$1,535.04
2		M4130NB0.500X03.000		4130 Bar 0.500 X 3.00 : MATERIAL: AISI 4130N STEEL BAR PER MIL-S-6758 OR AMS 6345/6348/6370/6528 CUT TO SIZE 14" receive ft	Firmed	-	11/28/18	46.667 ft	0 ft	47 ft	\$23.33/ft	\$1,088.74

Line Item Note 40 pcs cut at 14"

Grand Total: \$2,623.78

Order Notes

Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 11/21/18 3:14 PM dart.lavoie.chantal

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7
Tel.: 450 641-3330

Shipping Order

27/11/2018

Order : 140022
Reference : 41804
Ship : PICK UP / PICK UP

Customer: 6323336

Ship To

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
TP12A2	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N A-2 PLATE TFA 1/2" THICK 12 x 1.250" x 36" 23 x 1.250" x 32.5" -0+.125" ht: #94648 AK	240	240	0
MP124130N	4130 NORM PLATE .500 THICK AMS 6345 40 x 13" x 14" ht: 1961550 AK	11.66	11.66	0
ship journey collect jp				

Shipping :
Package No :
Merchandise Received:

Ref. : 15x36x9 510/bs



Métaux Solutions

L'alliage de qualité et de rapidité !

2625, Boul. Jacques-Cartier Est
Longueuil (Québec) J4N 1L7

info@metauxsolutions.com
T 450 641-3330
Ext : 1-800-967-2003

CERTIFICAT D'ANALYSE

28 nov. 2018

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

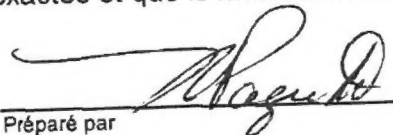
A2-05000		1.00	628.00	0.00
1/2 X 33 7/16" X 126 3/16" A2 PLATE				
ASTM A-681-08				
DFARS Compliant				
PLATE# : 425126A		PM HEAT# : 94648		BHN 230.00
Country of Origin USA				
C -	1.0000	Mn -	0.6800	P - 0.0260 S - 0.0020 Si - 0.3600 Ni - 0.2500
Cr -	5.0000	Mo -	1.0200	Cu - 0.0800 V - 0.3300 W - 0.0800

ITEM 1: 12 X 1.250" X 39"
23 X 1.250" X 32.5"

COMMANDE : 140022

REF : 41804

Métaux Solutions inc. certifie que les analyses sur ce document sont exactes et que le matériel rencontre les spécifications énumérées.

Préparé par 

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI A2 TOOL STEEL ANNEALED CONDITION

SPECIFICATION: ASTM A681

PART NUMBER: MSTEEL-A2-BT-TTT X W.WWW

WHERE "T.TTT" = THICKNESS IN INCHES
"W.WWW" = WIDTH IN INCHES

EG. 0.500" X 1.250" BAR = MSTEEL-A2-B0.500X1.250

PER ASTM A681 AS FOLLOWING

TOLERANCES:

TABLE 14 Hot-Rolled Flat Bars
(Width and Thickness Tolerances Width Tolerances)

Specification Width, in (mm)	Specified width, in (mm)		Width Tolerances, in (mm)		Thickness Tolerances, in (mm)	
	Under	Over	Under	Over	Under	Over
To 1.25 (31.75) and Over 1 to 2 (25.4 to 50.8) and Over 2 to 3 (50.8 to 76.2) and Over 3 to 4 (76.2 to 101.6) and Over 4 to 5 (101.6 to 127.0) and Over 5 to 6 (127.0 to 152.4) and Over 6 to 7 (152.4 to 177.8) and Over 7 to 8 (177.8 to 203.2) and Over 8 to 9 (203.2 to 228.6) and Over 9 to 10 (228.6 to 254.0) and Over 10 to 12 (254.0 to 304.8) and	0.005 (0.127) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152)	0.005 (0.127) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152)	0.005 (0.127) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152)	0.005 (0.127) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152)	0.005 (0.127) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152)	0.005 (0.127) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152) 0.006 (0.152)

7. Call out square tolerances to be 1/2 of total width tolerance.

RELEASED
2012-09-12

A		NEW ISSUE		DESCRIPTION		DATE	
REV.	DESIGN	AP	BY	DART AEROSPACE LTD		12.09.06	
CHECKED	DRAWN	AP		HAWKESBURY, ONTARIO, CANADA			
MFG. APPR.		N/A		DRAWING NO. MSTEEL-A2		REV. A	
DE APPR.				TITLE AISI A2 TOOL STEEL		SHEET 1 OF 1	
DATE 12.09.06				SCALE NTS			
COPYRIGHT © 2012 BY DART AEROSPACE LTD							

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MSTEEL-A2-B0.500x1.250

PO / BATCH NO.: P0041804/5132658

DATE: 18/11/28

MATERIAL CERT REC'D: KS
 QUANTITY RECEIVED: 98.29ft
 QUANTITY INSPECTED: 98.29ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500"
 THICKNESS RECEIVED: 0.500"
 SHEET SIZE ORDERED:
 SHEET SIZE RECEIVED:

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	<u>ASTM A681</u>
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	<u>117.94648</u>
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u> <u>61</u> 9-89	SIGNED OFF BY: _____		
DATE: <u>18/11/28</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

NUCOR STEEL

4537 S. NUCOR ROAD; CRAWFORDSVILLE, IN 47933

REPORT OF TESTS

ATTN:	DATE: 1/20/15
FAX:	
SOLD TO:	JSTOMER ORDER # 081414MC
SIZE: 0.500" by 36" steel sheet	PRODUCT: HRPO light oil FINE GRAIN AIRCRAFT QUALITY 4130 AMS 6345 Rev C ASTM-A 506 ASTM-A-635 AMS 2301 Rev J [successor to MIL-S-18729 COND N.] NORMALIZED OR OTHERWISE HEAT TREATED

AMS 6345

COIL #	HEAT #	YIELD	TENSILE	ELONG
1961550	248571-06	81.5 ksi	115 ksi	20%

TEST	RESULT
*Average austenite grain size	#8 Pass
Decarburization (P/F)	Pass
*Bend Test (P/F)	Pass
*Response to Heat Treatment (P/F)	45 HRC Pass
*AMS 2301 Quality Freq/Sev (P/F)	0/0 Pass


*These tests performed by outside lab, ISO 17025 certified.

HEAT #	C	Mn	P	S	Al	Si	N	Cr	Ni	Cu	Mo
248571	0.287	0.55	0.006	0.000	0.028	0.208	0.007	0.860	0.017	0.043	0.165

WE HEREBY CERTIFY THE ABOVE
IS CORRECT AS CONTAINED IN
THE RECORDS OF THE CORPORATION.

Melted and Manufactured in the USA

QF-0200, 10/17/05


Cold Mill Metallurgist

PURCHASE MATERIAL: AISI 4130N STEEL BAR PER MIL-S-6758 OR AMS 6345 6348/6370/6528

PART NUMBER: M4130N-B | T.TTT | X | WW.WWW |
 THICK | WIDTH

WHERE T.TTT = THICKNESS (IN INCHES)
 WW.WWW = WIDTH (IN INCHES)

EG. 0.5" X 3.0" BAR = M4130N-B0.500X03.000

RELEASED
 08.07.09

B	ADD AMS 6345	PH	08.05.05
A	NEW ISSUE	DS	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	M4130N-B	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	4130 BAR	NTS
DATE	08.05.05	COPYRIGHT © 2001 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PARTY WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4130NB0.500x03.000

PO / BATCH NO.: P0041804/S132661

DATE: 18/11/28

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.500"

QUANTITY RECEIVED: 46.667

THICKNESS RECEIVED: 0.500"

QUANTITY INSPECTED: 46.667

SHEET SIZE ORDERED: -

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	AMS 6345
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	HT: 1961550
CORRECT MATERIAL IDENTIFICATION	Y	N	
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT</u>	DAS 61 9-89	SIGNED OFF BY: _____	
DATE: <u>18/11/28</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in